

**PERMA-FIX<sup>®</sup>**  
ENVIRONMENTAL SERVICES, INC

December 20, 1999

Mr. Thomas Manning  
Project Manager  
Waste Management Branch  
United States Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590



**RE: Perma-Fix of Dayton, Inc. (OHD 004 274 031) transmittal of Quanterra, Inc.  
Standard Operating Procedure, Determination of Volatile Organics by GC/MS  
Based on Method 8260B, 624, and 524.2 (SOP No. CORP-MS-0002)**

Dear Mr. Manning:

Attached you will find a copy of the above referenced Standard Operating Procedure to be used by Quanterra, Inc. of North Canton, Ohio for the volatile organic analytical work proposed for the Perma-Fix of Dayton, Inc. RCRA Facility Investigation (RFI). As we discussed previously, we have been made aware that the use of the EnCore<sup>™</sup> sampler for volatile organic analysis is preferred by Region 5 EPA and it is our intention to utilize the EnCore<sup>™</sup> sampler during the RFI field activities. You had requested a copy of Quanterra's SOP for review, approval, and inclusion into the Quality Assurance Project Plan.

Please review the SOP and contact me with any problems or questions you may have. To allow adequate time for SOP review, and to work around laboratory and drilling firm schedule conflicts we have tentatively scheduled the RFI site activities to begin on January 17, 2000. Sampling activities will begin at approximately 8:30 am. We welcome your attendance during the site sampling activities.



Mr. Thomas Manning  
December 20, 1999  
Page -2-

If you have any questions on this matter, or if you require any additional information, please do not hesitate to contact me at my North Canton, Ohio office. The number there is (330) 498-9750. My address for written correspondence is:

4041 Batton Street NW  
Suite 110  
North Canton, Ohio 44720-7415

Sincerely,  
PERMA-FIX ENVIRONMENTAL SERVICES, INC.



Thomas A. Trebonik, CPGS  
Director of Compliance, Safety and Health

cc: Roger Randall, PESI w/o Attachment  
Jeff Pocisk, PFD w/ Attachment  
Phil Harris, OEPA w/ Attachment

**PERMA-FIX**  
ENVIRONMENTAL SERVICES

August 30, 1999

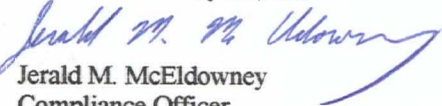
Mr. Thomas Manning  
United States Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

**RE: RFI Workplan  
Perma-Fix of Dayton, Inc.  
OHD004274031**

Dear Mr. Manning:

As you requested, please find enclosed two (2) copies of the RFI Workplan and the associated QAPJP. Also, I have enclosed a table of key personnel associated with the RFI. This table serves as the update to the Project Management Plan. Please note that I have not listed any contractors' or sub-contractors' yet. We are currently in the bid process for managing the work. I will update this information as the contractors' and sub-contractors' are chosen. Finally, I have submitted one copy of the above-mentioned documents to Mr. Phil Harris. If you should have any questions, please do not hesitate to contact me at (937) 268-6501 ext. 115.

Sincerely,  
Perma-Fix of Dayton, Inc.

  
Jerald M. McElDowney  
Compliance Officer

Cc: Jeffrey M. Pocisk - PFD - General Manager  
Thomas A. Trebonik - PESI  
Sudhir Singhal - OEPA - CO  
Phil Harris - OEPA - SWDO

**Perma-Fix of Dayton, Inc.  
R.C.R.A. Facility Investigation  
Key Personnel**

<b>NAME</b>	<b>AFFILIATION</b>	<b>PHONE NUMBER</b>
Jeffrey M. Pocisk	Perma-Fix of Dayton, Inc. – General Manager	937/268-6501
Jerald M. McEldowney	Perma-Fix of Dayton, Inc. – Compliance Officer	937/268-6501
Thomas Trebonik	Perma-Fix Environmental Services, Inc. Corporate Environmental, Health and Safety Manager	330/498-9750
Edward Van Schaik	Perma-Fix Engineering Senior Hydrogeologist	918/641-0700
Phillip Harris	Ohio Environmental Protection Agency	937/285-6000





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

June 17, 1999

REPLY TO THE ATTENTION OF

DW-8J

Mr. Jerald M. McEldowney  
Compliance Officer  
Perma-Fix Environmental Services  
300 South West End Avenue  
Dayton, OH 45427

Re: RFI Workplan Approval  
Perma-Fix Environmental Services  
OHD 004 274 031

Dear Mr. McEldowney:

The United States Environmental Protection Agency (U.S. EPA) has performed a review of all past revisions to your Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Workplan and the associated Quality Assurance Project Plan (QAPjP) and has made the decision to approve the RFI Workplan.

In lieu of this approval, you will need to make arrangements regarding project implementation within the time limits specified in the schedule of compliance section of your RCRA/Hazardous and Solid Waste Amendments permit.

The U.S. EPA is requesting that you send two (2) copies of the RFI Workplan and the associated QAPjP. One copy will serve as our working copy and the other will be kept in our records center. Please ensure the Project Management Plan has been updated with names of personnel associated with the RFI. This update should include phone numbers of key personnel (I suggest a simple table with the headings: "Name", "Affiliation", and "Phone Number"). Facility, contractor, sub-contractor, and Federal oversight personnel should be included. Please submit these documents within 45 calendar days of your receipt of this letter.

I am looking forward to the opportunity to work with you through the corrective action process. If you have any questions regarding this letter, or other questions/comments regarding the corrective action process, please call me at (312) 886-6943.

Sincerely,

A handwritten signature in cursive script, reading "Thomas Manning", is written over a horizontal line.

Thomas Manning, U.S. EPA, Project Manager



COMMENTS  
ON  
RFI WORKPLAN

PERMA-FIX OF DAYTON  
DAYTON, OHIO  
OHD 004 274 031

1. Pg.8, 1st bullet, item 2. It states soil was removed from SWMU 30 and 31 and disposed of in a landfill. In classifying the waste, was there any soil testing for physical or chemical characteristics performed? If so, that data should be made available for review.
2. Pg.8, 5th bullet, item 2. Same comment as #1 but for SWMU 35.
3. Pg.8, 6th bullet. Please provide more detail in the workplan on the history of the tank and eventual disposal (e.g., contents of the tank and any records of leakage, etc.).
4. Pg.11, Section V.A., 2nd par. Existing data has already been evaluated to identify and characterize each SWMU. Although no significant impacts were found, data gaps exist in making final decisions about hazardous waste/constituent contamination at the site. Existing information indicates sufficient potential for contamination to occur and, consequently, further investigation is warranted to adequately characterize the site. The proposed sampling scheme received by the U.S. EPA on October 10, 1996, when approved, will provide the data needed to characterize the site and the need for further corrective action.
5. Pg.11, Section V.A.1. The draft workplan states that PFD will attempt to characterize the hydrogeologic conditions at the site using existing information and results of the proposed RFI Phase 1 Groundwater Quality Assessment (GQA), if PFD finds any potential for impacts to groundwater. It is clear from reading the workplan that PFD does not believe there are any impacts to groundwater. Therefore, does this mean that a hydrogeologic characterization will be performed or not?. Secondly, because little information presently exists for use in characterizing the hydrogeologic conditions at the site and the proposed GQA doesn't generate any additional information, how does PFD expect to adequately describe the hydrogeologic conditions at the site without obtaining substantially more data?



Finally, any investigations that are not to be conducted as part of the proposed workplan, should not be presented in the workplan. Therefore, Section V.A.1.a) through f), which relate to potentially later phases of the RFI process, should be deleted from the text.

6. Pg.13, Section V.A.2. Adequate soil characterization for this investigation can be provided from well log information using standard soil classification procedures. The other informational items ( b through u) can be deleted from the text.

7. Pg. 13/14, Section V.A.3. As stated in the workplan, no surface water bodies are located near the PFD facility. Surface water and sediment characterization is, therefore, not needed. Section V.A.3 should be deleted from the workplan.

8. Pg.14/15, Section V.A.4. Meteorological information presented under "Facility Background" (Sect. II.A.2.4) is sufficient for corrective action purposes at this site. Therefore, delete Section V.A.4 from the workplan.

9. Pg.16, Section V.B.2. Under waste characteristics, a more general description of the waste, e.g., listing, quantities generated, how it is managed, and potential for contamination, is sufficient for the workplan. Therefore, delete Section V.B.2.b) and c) from the workplan. Also, although the workplan proposes to characterize wastes found to be source(s) of impacts to the environment, there are no procedures presented in the workplan to accomplish that task. This deficiency needs to be addressed.

10. Pg. 17, Section V.C., par. 2 and 3. Existing information was evaluated during the PR/VSI and permit development. This information was used to identify SWMUs at the site and assess their existing or potential as sources for releases of hazardous waste and/or constituents. The purpose of the RFI is to take the next step and verify the existence of contamination and, if so, the nature and extent of that contamination. The proposed Phase I RFI simply evaluates existing information that has already been done. The RFI needs to take that next step and gather adequate information to substantiate the presence or absence of contamination at the site based on what is already known and, if contamination is present, to determine the nature and extent of it. The data should be adequate for use in assessing risk and any corrective measures that would be needed.

11. Pg. 17, Section V.C., 3rd par. It is stated that Phase I will evaluate existing data and further investigations will be performed in later phases. However, the next paragraph refers to the collection of data at each SWMU. It is unclear what phase



the data will be collected. If it is in Phase I, then that needs to be better explained and the details on how it will be accomplished should be included by reference to a specific section in the workplan.

- 12. Pg. 17, Section V.C., 4th par. The U.S. EPA has always considered areas which have been contaminated through routine and systematic releases of hazardous waste or constituents to be SWMUs, irrespective of whether the unit was intended for the management of solid or hazardous waste. As such, groundwater that is impacted by hazardous waste/constituents is considered a SWMU.
- 13. Pg. 17, Section V.C., last sent. This type of information is best presented in table form as part of the QAPP.
- 14. Pg. 18, Section V.C.1, 1st sent. Although a groundwater investigation may include the areas (SWMUs) listed in Attachment II of the permit, the permit does not specifically require that any particular media be addressed at any of the SWMUs requiring further investigation. If groundwater investigations are appropriate at the SWMUs listed, then they should be included in the workplan, however, reference to the permit as the basis for the selection should be deleted.
- 15. Pg. 18, Section V.C.1. An explanation of the requirements for groundwater assessment is only needed if an assessment is conducted. If it is not, then the requirements should be deleted.
- 16. Pg. 19, 1st par. In the review of previous groundwater investigations, there is no presentation or reference to any of the data collected from those investigations. This needs to be done to support the assessment.
- 17. Pg. 19, 2-4th par. The proposal to re-evaluate previous data as the basis for assessing groundwater at the site is not needed. Previous groundwater data has already been presented and evaluated in terms of groundwater impact and does not need to be restated. Since the phased approach is not considered necessary, any groundwater investigations should be described in this workplan.
- 18. Pg. 19, last par. The proposed workplan defers any further investigations of groundwater until previous data can be re-evaluated. Since the evaluation of previous data described in the workplan does not indicate any groundwater impact, it is rather implicit that further investigations will not be required. Also, describing how data collected from later phases will be used without knowing what data will be collected and whether



further investigations are warranted, is to presumptive and not pertinent to the proposed workplan and should be deleted.

- 19. Pg. 20, Section V.C.2, 1st par. See Comment 14.
- 20. Pg. 20, 2nd par., bullet items a-e. If the items listed under a-e are not part of the proposed workplan (i.e., Phase II), then they should be deleted.
- 21. Pg. 22, 1st par., 2nd sent. The rationale for collecting various samples and performing "tests" needs to be presented in terms of addressing the objectives of the RFI. The term "headspace tests" needs further explanation on the type of tests and purpose for the tests.
- 22. Pg. 22, 2nd and 6th pars. Please explain how the objectives of Phase I, as stated on page 21 (the results of these investigations will be summarized and used to characterize the vertical and horizontal extent of any impacts to soil...), will be accomplished for soils using data from one sampling point?
- 23. Pg. 22. Taking a soil gas sample from a borehole that is larger than the soil gas probe can potentially result in invalid data. More detail on the sampling procedure is needed as well as the purpose of the samples.
- 24. Pg. 23, 4th par. A grid coordinate system is unnecessary when only one sampling point is selected. Instead, selecting a point where the likelihood of contamination exists is a better approach.
- 25. Pg. 24, last par. A historical review of contaminant levels at SWMUs 30 and 31 does not have to be presented in the workplan and should be deleted.
- 26. Pg. 25, 3rd par. See Comment #24.
- 27. Pg. 32. It is unclear how many soil samples will be collected and sampling points screened at SWMUs 35/B. In the second paragraph, it states that 4 sampling points will be generated and 16 samples collected and that one shallow and one deep sample will be collected from each of 4 boreholes. In the fourth paragraph, it states 4 shallow and 4 deep samples will be collected, of which only the 4 shallow samples will be submitted for analysis. This discrepancy needs to be cleared up.
- 28. Pg. 40, Section V.C.5. See Comment #14.
- 29. Pg. 41, 1st par. Please explain how objectives a-d will be satisfied using data from one to four soil gas samples at the



SWMUs discussed in V.C.2?

30. Pg. 41, Section V.D. This section of the workplan should be removed and incorporated as part of a risk assessment that is developed after the RFI process is completed. A separate risk assessment workplan can be submitted as part of the RFI workplan or as a separate workplan submitted after the RFI and before the Corrective Measures Study. A pre-risk assessment meeting is encouraged to discuss the content of the risk assessment.

31. Pg. 43, Section VII. Is the outline for Phase I only or for all phases?

32. Appendix 8, Community Relations Plan, Pg. 1, 3rd par. The facility mailing list used for the corrective action activity should be the list developed for the Federal permit, where corrective action is required. Also, the information repository should be easily accessible by the public and the location made clear.

COMMENTS ON TABLE ON SAMPLE ANALYSIS BY SWMU (submitted on October 4, 1996)

1. The data generated from analyses using Methods 8260 and 8270 include the full list of volatile and semi-volatile compounds for which the methods are capable of detecting. Analysis is not limited to just a few select compounds, such as F001-F005 solvents. Consequently, any data presentations should include all of the compounds that are analyzed for. In this way, there are no questions about the presence of "other" constituents at the site.

2. Previous sampling at SWMU B has identified several organic contaminants found in holding tanks from that area. It is unknown whether any of those contaminants have been released to the surrounding soil. Consequently, soil sampling at SWMU B needs to be conducted and analyzed for both volatiles (Method 8260) and semi-volatiles (Method 8270).





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

DEC 04 1997

DRP-8J

Mr. Thomas Trebonik  
Mintech, Inc.  
4608 South Garnett  
Suite 100  
Tulsa, Oklahoma 74146

RE: RFI Workplan  
Perma-Fix of Dayton.  
OHD 004 274 031

Dear Mr. Trebonik:

This letter is in response to the revised RCRA Facility Investigation (RFI) Workplan submitted to the United States Environmental Protection Agency (U.S. EPA) and Quality Assurance Project Plan (QAPP) from Mintech, Inc. on March 13, 1997, representing Perma-Fix (PFD) of Dayton, Ohio. The revised RFI Workplan was in response to comments sent by the U.S. EPA on January 21, 1997.

A review of the revised RFI Workplan has been performed and has been determined to be responsive to concerns previously identified. A separate review of the Quality Assurance Project Plan (QAPP) was performed by the Region 5 QAPP Coordinator for the RCRA Branch. Based on this review, please find enclosed a copy of U.S. EPA's comments addressing QA/QC issues.

Please send responses to the enclosed comments to me within 45 days from receipt of this letter. If you have any questions or concerns about the above matter, please give me a call at, (312) 886-4447.

Sincerely,

A handwritten signature in cursive script that reads "Pamela Blakley".

Pamela Blakley  
Minnesota Ohio Wisconsin Section

Enclosure

cc: John Maher, Tectra Tech EM Inc.  
Stephanie Nguyen, MOWS

## Comments

1. SWMU 30, 31, 32, 36: Oily films have been found on the pond water which should be analyzed for petroleum hydrocarbons. The following items need to be addressed:
  - a. Petroleum Hydrocarbon method needs to be provided;
  - b. Please specify, in detail, how identifications are being performed (i.e., individual peaks or patterns used for identifications);
  - c. Please specify the sample quantitations that are being performed (i.e., the concentrations are estimated, based on total area or the concentrations estimated based on individual peaks and quantified separately);
2. SWMU 36, 39: High level of barium was found in SWMU 36 and high level of metals, such as barium, lead, chromium, and zinc, were found in SWMU 39. Please include the metals parameters for this project.
3. The rationale for selecting a 4-foot depth above the water table and 4 feet (down) below the water table is incomplete. Please specify in detail why a 4-foot depth is preferred.
4. Please explain how the soil samples between 0 and 4 feet depth will be collected in such a way as to be representative of the soil characteristics.
5. Section 3.1: Only limited VOC and SVOC are proposed to be analyzed. This is unacceptable. The Target Parameters need to be expanded.
6. Table 3-2:
  - a. The Table lists Vinyl Chloride with an Estimated Quantitation Limit (EQL) of 10 µg/kg by using method 8260; this is inappropriate. A lower EQL is preferred. A detection limit of 0.2 µg/kg can be achieved by using method 8021B.
  - b. The table lists Dibenzo (a,h) pyrene with a detection limit of 330 µg/kg; this is inappropriate. By using Method 8310 a lower detection limit can be achieved.
7. According to the May 14, 1992, report, lead was found in ground water with the concentration of 0.13 µg/l. In CPGM-3, the lead concentration is 0.036 µg/l, and at CPGM-4



it is .042 µg/l; these levels are considered high compared to the drinking water action level for lead, which is 0.015 µg/l. Please note that the action level for lead is 0.015 µg/l not 0.05 µg/l as stated.

8. Please explain why the Toxicity Characteristic Leachate Procedure (TCLP) was analyzed.
9. Table 1.1, Page 1, SWMU 29, 34, 36, 37: Please remove the following statement: "All visually contaminated soil plus an additional 6 inches of soil was removed from this area; limit analysis to F001 - F005; limit analysis to semi-volatile organic compounds."
10. Section 4.1, Page 1: Please describe in detail the procedure of how soil samples will be collected for volatile organic compounds by using the Geo-Probe method.
11. Page 4: Frequency of sample duplicates need to be identified. Duplicate samples should be collected as one per twenty or fewer investigative samples.
12. Page 8: Please note that field blanks for soils are not required due to the lack of a blank solid material and noncomparability of water blanks with solid samples.
13. SOP, GC/MS Volatile Organic Compounds, Method 8260 for low level: Matrix spike and matrix spike duplicates must be collected with a frequency of one per twenty investigative samples or less.
14. Section 9.4.1: The statement: "...for each sample, blank, and MS/MSD is spiked with surrogate standards" is unacceptable. The internal standards also need to be spiked with surrogate. Please revise this statement accordingly.
15. The Method listed for low level water and the parameter to be analyzed is soil matrix. A sample preparation method needs to be submitted for soil.
16. Please provide the sample preparation procedure and extract cleanup for SW846-Method 8270.
17. Please provide a summarized table regarding sample collection, including matrix, volume of samples, number of samples to be collected, type of containers, holding time, etc.).



## Comments

1. SWMU 30, 31, 32, 36: Oily films have been found on the pond water which should be analyzed for petroleum hydrocarbons. The following items need to be addressed:
  - a. Petroleum Hydrocarbon method needs to be provided;
  - b. Please specify, in detail, how identifications are being performed (i.e., individual peaks or patterns used for identifications);
  - c. Please specify the sample quantitations that are being performed (i.e., the concentrations are estimated, based on total area or the concentrations estimated based on individual peaks and quantified separately);
2. SWMU 36, 39: High level of barium was found in SWMU 36 and high level of metals, such as barium, lead, chromium, and zinc, were found in SWMU 39. Please include the metals parameters for this project.
3. The rationale for selecting a 4-foot depth above the water table and 4 feet (down) below the water table is incomplete. Please specify in detail why a 4-foot depth is preferred. *ok*
4. Please explain how the soil samples between 0 and 4 feet depth will be collected in such a way as to be representative of the soil characteristics.
5. Section 3.1: Only limited VOC and SVOC are proposed to be analyzed. This is unacceptable. The Target Parameters need to be expanded.
6. Table 3-2: *or*
  - a. The Table lists Vinyl Chloride with an Estimated Quantitation Limit (EQL) of 10 µg/kg by using method 8260; this is inappropriate. A lower EQL is preferred. A detection limit of 0.2 µg/kg can be achieved by using method 8021B.
  - b. The table lists Dibenzo (a,h) pyrene with a detection limit of 330 µg/kg; this is inappropriate. By using Method 8310 a lower detection limit can be achieved.
7. According to the May 14, 1992, report, lead was found in ground water with the concentration of 0.13 µg/l. In CPGM-3, the lead concentration is 0.036 µg/l, and at CPGM-4

PRG  
DQL

*ok*



it is .042 µg/l; these levels are considered high compared to the drinking water action level for lead, which is 0.015 µg/l. Please note that the action level for lead is 0.015 µg/l not 0.05 µg/l as stated.

8. Please explain why the Toxicity Characteristic Leachate Procedure (TCLP) was analyzed. clarification
9. ☒ Table 1.1, Page 1, SWMU 29, 34, 36, 37: Please remove the following statement: "All visually contaminated soil plus an additional 6 inches of soil was removed from this area; limit analysis to F001 - F005; limit analysis to semi-volatile organic compounds."
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12. ☒ Page 8: Please note that field blanks for soils are not required due to the lack of a blank solid material and noncomparability of water blanks with solid samples.
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16. Please provide the sample preparation procedure and extract cleanup for SW846-Method 8270.
17. Please provide a summarized table regarding sample collection, including matrix, volume of samples, number of samples to be collected, type of containers, holding time, etc.).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

MAR 05 1997

REPLY TO THE ATTENTION OF:

Tim Brandon, Manager  
Mintech, Inc.  
4608 South Garnett, Suite 100  
Tulsa, Oklahoma 74146

RE: RFI Workplan Extension  
Perma-Fix of Dayton  
OHD 004 274 031

Dear Mr. Brandon:

On February 28, 1997, the United States Environmental Protection Agency (U.S. EPA) received a request from Mintech, Inc., representing Perma-Fix of Dayton, for an extension to its submittal date of March 6, 1997, for the RFI Workplan. The request was for an extension of 15 days, or until March 21, 1997. The extension is requested because of delays in completion of the Quality Assurance Project Plan (QAPP) due to time lost in the laboratory selection process.

The U.S. EPA has evaluated Mintech's request and has made a decision to approve the extension of the RFI Workplan submittal date to March 21, 1997. The extension should allow Mintech adequate time to complete the development of the workplan.

If you have any questions about the above matter, please give me a call at (312) 886-0656.

Sincerely,

A handwritten signature in cursive script that reads "Daniel Patulski".

Daniel Patulski  
Project Manager





4608 SOUTH GARNETT, SUITE 100 • TULSA, OKLAHOMA 74146  
(918) 641-0700 FAX (918) 641-0766

**TELECOPY COVERSHEET**

TIME: \_\_\_\_\_

DATE: 2/28/97FILE NUMBER: 9005-2PLEASE DELIVER TO: Dan Patulski:COMPANY: USEPA Region 5 Office RCRA, DRP-8JTELECOPIER NUMBER: (312) 353-4788TRANSMITTAL FROM: Tim BrandonCOMPANY: MINTECH, INC.TELECOPIER NUMBER: (918) 641-0766TOTAL NUMBER OF PAGES (INCLUDING COVERSHEET) (2)

ANY PROBLEMS AND/OR CONFIRMATION:

(918) 641-0700

TELECOPY OPERATOR

We will be talking with you and Stephanie Nguyen on  
Monday, March 3, 1997 (10:00 AM) per our phone messages and  
conversation on February 28, 1997.



**MINTECH**  
INCORPORATED  
ENVIRONMENTAL ENGINEERS

4608 SOUTH GARNETT, SUITE 100 • TULSA, OKLAHOMA 74146  
(918) 641-0700 FAX (918) 641-0766

28 February 1997

Daniel Patulski, Project Manager  
Office of RCRA, DRP-8J  
U.S. EPA, Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604

Attn: OH/MN/WI Section

RE: Perma-Fix of Dayton, Inc. (PFD) EPA ID No. OHD 004 274 031  
Final Federal (HSWA) Permit - RFI Workplan  
Request for Extension of Date for Submittal of RFI Workplan and QAPP

Dear Mr. Patulski:

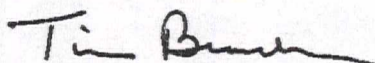
As we discussed in our telephone conversation on February 20, 1997, PFD is requesting a 15 day extension of the March 6, 1997, deadline for submittal of the revised RFI Workplan and of the Quality Assurance Project Plan (QAPP). In accordance with the HSWA permit requirements, the Workplan must be modified within 30 days of receipt of a disapproval. On February 4, 1997, PFD received a disapproval in correspondence from U.S. EPA Region 5, dated January 21, 1997.

PFD is requesting this 15 day extension because of delays in compilation of the QAPP due to the laboratory selection process. PFD originally selected a particular laboratory from a list of laboratories with RCRA experience. PFD recently discovered that this laboratory could not readily provide a CLP-SOW. Therefore, PFD selected Quanterra, Canton, Ohio, as a laboratory that unquestionably will meet the desired QA/QC objectives and procedures. Some time was lost in this process, but PFD believes the overall quality of results from the RFI will be improved.

PFD and Mintech feel that the extension of the deadline until 21 March 1996 will provide the time needed to complete compilation of an adequate RFI Workplan and QAPP.

Please call me at telephone number 918/641-0700 if you have any questions or need additional information.

Sincerely,  
Mintech, Inc.



Tim Brandon, C.P.G.  
Manager, Environmental Sciences

cc: Roger Randall, PFD  
Thomas A. Trebonik, Mintech  
Cathy Orban, Mintech





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

NOV 13 1996

Thomas Trebonik, President  
Mintech, Inc.  
4608 South Garnett  
Suite 100  
Tulsa, OK 74146

DRP-8J

RE: RFI Workplan Extension  
Perma-Fix of Dayton  
OHD 004 274 031

Dear Mt. Trebonik:

On November 12, 1996, the United States Environmental Protection Agency (U.S. EPA) received a letter from Mintech, Inc., requesting a 15 day extension of the November 27, 1996, deadline for submittal of a revised RFI Workplan for the Perma-Fix of Dayton (PFD) facility in Dayton, Ohio. The extension would allow PFD to extend its submittal date to December 12, 1996.

After reviewing the letter and the reasons for the above request, the U.S. EPA has decided to grant the extension request for the submittal date of the RFI Workplan to December 12, 1996. This added time will allow Mintech to adequately address all of the comments to the workplan.

If you have any questions on the above matter, please give me a call at (312) 886-0656.

Sincerely,

A handwritten signature in cursive script that reads "Daniel Patulski".

Daniel Patulski  
Project Manager

11 November 1996

Daniel Patulski, Environmental Scientist  
Office of RCRA, DRP-8J  
U.S. EPA, Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604

Attn: OH/MN/WI Section

RE: Perma-Fix of Dayton, Inc. (PFD)  
Final Federal (HSWA) Permit - RFI Workplan  
Comments Dated 25 October 1996; Received 28, October 1996

EPA ID No. OHD 004 274 031

RECEIVED  
NOV 14 1996  
DIVISION FRONT OFFICE  
Waste, Pesticides & Toxics Division  
U.S. EPA - REGION 5

Dear Mr. Patulski:

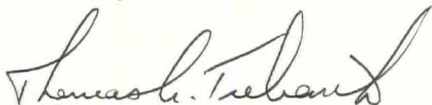
As discussed during a telephone conversation with Catherine Orban of my staff on 5 November 1996, PFD is requesting a 15 day extension of the deadline for submittal of the revised RFI Workplan. As specified in the correspondence referenced above, the modified RFI is due within 30 days of receipt of workplan comments (i.e., by 27 November 1996).

PFD is requesting this 15 day extension for several reasons. As you know, PFD has contracted with Mintech, Inc. for services regarding the RFI. During the first week of November, Mintech relocated to new office space; the move has resulted in scheduling conflicts for personnel involved with the PFD RFI Workplan. In addition, concerns regarding the laboratory originally selected by PFD may pose additional complications with QA/QC activities. It is our intention to immediately begin screening different laboratories which will meet the desired QA/QC objectives and procedures.

PFD and Mintech feel that the extension of the deadline until 12 December 1996 will provide the time needed to adequately address the comments referenced above. It is still our objective to begin field work for the RFI as soon as possible and not to wait until spring of next year.

Thank you for your consideration of this matter. Please call me at telephone number 918/641-0700 if you have any questions or need additional information.

Sincerely,  
Mintech, Inc.



Thomas A. Trebonik, CPGS  
President

cc: Roger Randall, PFD



**PERMA-FIX**  
ENVIRONMENTAL SERVICES  
FORMERLY CLARK PROCESSING, INC.

June 20, 1996

Mr. Daniel Patulski  
Waste Management Branch, DRP-8J  
Waste, Pesticides and Toxics Division  
USEPA Region 5  
77 West Jackson Blvd.  
Chicago, IL 60604

**RECEIVED**  
JUN 24 1996

**OFFICE OF RCRA**  
WASTE MANAGEMENT DIVISION  
EPA, REGION V

Dear Mr. Patulski:

Under separate cover, please accept the required RFI Work Plan submitted on behalf of Perma-Fix of Dayton, Inc. (PFD) per the requirements of HSWA Permit Conditions III.F.1, which references Attachment III (RCRA Corrective Action Plan), and III.F.1.A; these requirements specify development of a RCRA Facility Investigation Workplan (RFI Workplan), as detailed in the permit conditions referenced above, and submittal of the workplan to the Regional Administrator (i.e., USEPA Region 5). In submitting the Work Plan, PFD wishes to inform USEPA that PFD strongly feels that the scope of the Work Plan required under the facility's HSWA permit forces PFD to conduct a level of investigation which is not warranted by the facility's operating history. A short review of the facts surrounding the facility history will serve to elaborate on the stance which PFD is compelled to take.

In establishing the permit requirements for the Corrective Action portion of the PFD HSWA permit, USEPA utilized the information collected through the PR/VSI conducted by A. T. Kearney in 1989. While several SWMUs were identified by A. T. Kearney, the vast majority of the information in the A. T. Kearney report was extracted from a site characterization study performed by OHM, Inc. of Findlay, Ohio. This study was prepared by OHM as part of their efforts to purchase the PFD facility (known as Clark Processing, Inc.) in 1989.

A. T. Kearney has placed a high level of value on the data collected within the OHM report. The analytical data contained in the report was used to identify the majority of the SWMUs at the facility which require further investigation. What USEPA may not realize is that the OHM report was generated by OHM as part of the due diligence investigation conducted by OHM at the time that OHM was considering purchasing the Clark facility. As a result, the OHM report is by no means an unbiased view of the facility. Rather, the report was generated as part of the negotiation process to be conducted with the Clark stockholders at the time, and therefore, presented information from a negative perspective to provide negotiating leverage. In addition to several operational inaccuracies, the analytical data contained in the report was generated by an "in house" OHM laboratory. No independent review of either the samples or the



analytical data was ever performed. PFD maintains that the use of this data for the purpose of SWMU indentification is unwarranted.

Both prior to, and after the PR/VSI, PFD undertook interim measures to improve the appearance and functionality of the facility. Any areas that facility personnel identified as requiring clean up efforts were handled using the following procedure. First, soil sampling was conducted to confirm that any existing contamination was limited to petroleum hydrocarbons. Second, soil was removed from all contaminated areas until samples collected from any excavation displayed a non-detectable level of hydrocarbon contamination. Site personnel involved in these activities would be willing to give sworn testimony that this was indeed the established and unwaveringly followed procedure. Unfortunately, in the years that have passed since these interim measures were taken, the analytical data has been lost.

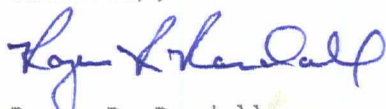
Still, investigations conducted since both the interim measures and the PR/VSI have been conducted as part of due diligence efforts conducted by two firms which ultimately purchased the facility. First, an investigation conducted by Geraghty and Miller (G & M) in 1992 for the Quadrex acquisition of Clark serves to refute the OHM and A. T. Kearney reports. Geraghty and Miller reviewed both reports prior to conducting their investigation of the site. The soil and groundwater sample locations that were used by G & M were chosen to specifically confirm or refute the findings of the prior reports. The findings and conclusions of G & M were, of course, acceptable to Quadrex. Further, G & M was able to give a very positive review as to the cleanliness of the facility.

A subsequent evaluation conducted by Mintech, Inc. on behalf of Perma-Fix Environmental Services, Inc. also included a review of all previous reports on the Clark facility. Results from this evaluation were favorable, and subsequently resulted in the acquisition of the facility by Perma-Fix.

To reiterate, PFD feels that the scope of the Work Plan, while meeting the permit requirements, is far too detailed, given the past history of the facility. Therefore, PFD requests a meeting, at your convenience in Chicago, to further outline the facts concerning the facility. PFD intends for this meeting to serve as the basis for a reduction in the required scope of the RFI Work Plan.

After you have had a chance to review both this cover letter and the RFI Work Plan, please contact me so that a meeting date and time may be established. I look forward to hearing from you soon.

Sincerely,

A handwritten signature in blue ink, appearing to read "Roger R. Randall".

Roger R. Randall  
General Manager



JUN 3 - 1996

Cathy Orban  
Perma-Fix Environmental Services  
10905 E. Marshall, Suite 101  
Tulsa, OK 74116

RE: Quality Assurance Project Plan  
Perma-Fix of Dayton  
OHD 004 274 031

Dear Ms. Orban:

In follow-up to our phone conversation on May 31, 1996, I have enclosed a disc that contains the Model Quality Assurance Project Plan (QAPP) used by Region 5 for corrective action activities at regulated facilities. The Model QAPP should be used in the development of a QAPP for the RFI Workplan to be submitted for the Perma-Fix of Dayton facility in Dayton, Ohio.

As discussed in our phone conversation, the QAPP can be submitted subsequent to the submittal of the RFI Workplan, since the workplan submittal date deadline is coming up shortly. The next step in the QAPP process is to set up a pre-QAPP meeting to go over the Model QAPP and the specific requirements within the QAPP. The meeting should be as soon as possible because it is the first step in the process. Please give me a call when you have a date in mind.

Also enclosed are the Data Quality Levels developed by Region 5 for use in setting action levels for the site.

If you have any questions on the above matter, please give me a call at (312) 886-0656.

Sincerely,

Daniel Patulski  
OH/MN/WI Section



MAY 23 1996

Mr. Louis Centofanti  
Perma-Fix Environmental Services  
1940 N.W. 67th Place  
Gainesville, Florida 32653

HRP-8J

RE: RFI Workplan Extension  
Perma-Fix of Dayton, Inc.  
OHD 004 274 031

Dear Mr. Centofanti:

On May 17, 1996, the United States Environmental Protection Agency (U.S. EPA) received a letter from Perma-Fix Environmental Services, Inc. requesting a 30day extension to its permit requirement (Condition III.F.1.a.) for submission of a RCRA Facility Investigation (RFI) Workplan for its facility in Dayton, Ohio. Because of recent corporate restructuring, Perma-Fix requests an additional 30 days to allow incorporation of historical information into the RFI Workplan, resulting in a more complete and accurate document.

The U.S. EPA has reviewed the above request and has made a decision to approve the request for a 30 day extension for submittal of the RFI Workplan. With this extension, the submittal deadline is changed to June 24, 1996.

If you have any questions about the above matter, please give me a call at (312) 886-0656.

Sincerely,

Daniel Patulski  
OH/MN/WI Section

cc: Catherine Orban, Mintech



**PERMA-FIX**  
ENVIRONMENTAL SERVICES

**RECEIVED**

MAY 17 1996

**OFFICE OF RCRA**  
WASTE MANAGEMENT DIVISION  
EPA, REGION V

May 15, 1996

Mr. Daniel Patulski  
United States Environmental Protection Agency  
Region V/DRP-8J  
77 West Jackson Boulevard  
Chicago, IL 60604  
Via: Overnight Courier

Dear Mr. Patulski:

Per your discussion with Catherine Orban on May 14, 1996, Perma-Fix of Dayton, Inc., (PFD) a subsidiary of Perma-Fix Environmental Services, Inc., is requesting a 30 day extension to the deadline for submittal of the RCRA Facility Investigation (RFI) Workplan. PFD is requesting this extension to allow incorporation of historical information into the RFI Workplan. This process has been complicated by recent corporate restructuring. Access to and inclusion of all historical information into the RFI Workplan will result in a more complete and accurate document.

If this request for extension is approved, you will receive PFD's RFI Workplan in your office on or before June 24, 1996. Should you have any questions or concerns, please feel free to contact Catherine Orban at 918-437-6280.

Sincerely,

*Phil T. Kelly, CFO*  
For  
Louis Centofanti

Louis Centofanti  
President

c: Tom Trebonik - Mintech  
Catherine Orban - Mintech  
Roger Randall - PFD  
Jennifer Hazard - PESI